### Lake Charles

## Woodworkers Club, Inc.

June 2000

Chuck Middleton, President Dick Hopes, Sec/Treasure

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John Marcon, Barry Humphus, Brent Evans, George Kuffel

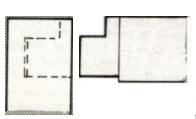
### **MAY MEETING HIGHLIGHTS**

Our host, Burl Vincent, opened (and cleaned) his great shop for us this month. Leading off was Pam Breaux of the Arts and Humanities Council. Pamtalked about the up-coming Millineum Park project begining September 6th and ending September 17th. She breifly described the project and the up-comming program. We'll have more about the project in a later newsletter.

Steve and Terry LeGrue once again demonstrated their expertise and this time with basic joinery techniques. He began by saying that old furniture has largely survived because the maker knew something about good joinery and proper assembly techniques. Steve discussed several basic old type joints as well as new techniques that contribute to the longevity of furniture.

End grain is not a candidate for edge joining because of its open cell structure. When glue is applied to these cells, they act like sraws, drawing the glue in and leaving little at the surface where the bond is formed. However, when end grain must be joined to edge or face gain, the joint of choice is the Mortise and Tendon.

You make the mortise first and then adapt the tendon. Several methods exist for making the mortise including: drilling holes and using a chisel; using a mortising cutter — either a dedicated mortiser or a motising adapter for a drill press; or, use a router. Whatever the method, the key is to make clean and straight sides for the mortise to give the most glueing area with the most wood-to-wood surface. If you use the drill to make the bulk of the cut, find yourself a mortise chisel — that works



better than a standard chisel. You can use a table saw to creat the tendons. But be careful when using tendoning jigs for table saws as these can bind and kick out the piece. When using a router to make the mortise, it's easier to round

the edges of the tendon rather than square the corners of the mortise. Using a blind mortise and tendon joint gives you the advandage of resistance to racking in applications such as frame to table legs. See the illustration above. The haunch at the top of a tendon keeps the joint from racking.

Tongues, Rabets & Dados provide a joint that is always face to end grain. It's best to use small tongues — no more than 1/3 of the thickness of the board. These are often used for making boxes and drawers.

The classic dovetail joint can be hand or machine cut. Hand cutting takes much practice but can be a very satisfying endevor. Machine cutting your dovetails is quick and accurate with a dovetail jig or dedicated machine such as a ShopSmith Jointmatic. Steve suggests that you first cut the pins and then the tails as this makes for far more accurate joints.

The only real joint making innovation during the past 400 or so years is the plate joint. Over the past ten years or so, the plate jointer has become a popular power tool in the home or commercial workshop. Also called a bisket joint, the technique uses a special machine that cuts a slot into the two sides of the peices to be joined. A properly sized bisket is coated with glue and inserted into this slot and the pieces assembled. This technique makes for very strong joints of end grain and face grain. The joint is very forgiving in that you can make mistakes that still turns out perfectly. Jointing miters, for example is a particularly difficult task made much easier with the plate joint.

In fact, you don't need a specialized plate jointer if you have a router and the appropriate plate joint bits. The biskets are typically made of beachwood which swells considerably when exposed to the moisture in standard wood glues. In fact, you need to keep your biskets well sealed against absorbing moisture in a humid shop. You can dry themout using a microwave oven, according to Steve. However, be careful that you don't leave them in the microwave too long and make a chared mess in your spouse's nice oven.

Each of our members has benefited every time the LeGrues have joined us and we all look forward to next year.

### ANNUAL JUNE BBQ

Once again it's time for our Annual BBQ. We already know the menu. Brent Evans has once again agreed to be our chef and this time, he's bringing his favorite recipes: Baby Back Ribs and his Killer Beans. Having had both, I can testify that you can't get enough and there are never any left over. Chuck Middleton will be contacting some of you to assist in the setup, picking up the refreshments, etc.

We'll be calling you to get a head count so if you say you're going to be there, please show up!

We'll preceed the dinner with a special Swap Meet (and of course, Show & Tell). Each of us has received many woodworking magazines over the years. This is your chance to get rid of the ones in your shop that are taking up valuable space for tools and wood. Bring the woodworking magazines that you don't want and are willing to exchange for ones of interest from others. I know I have a stack of them in my shop. Bring the old Fine Woodworking, American Woodworker, Popular Woodworking, Wood and any others that may be of interest to the meeting and we'll exchange them.

COMING UP.....

# June 21st, WEDNESDAY — Annual BBQ! PPG Pavillion, 6:30 P.M. See map on back.

July 8th, Saturday — Julian Dondis of Greengate Garden Center on Garden Design & Garden Furniture.

#### SHOP NOISE LEVELS

Loud noises are fatiguing. Sometimes accidents happen because a tool is so loud that people hurry to finish a cut or some other operation and make a mistake that they probably wouldn't ordinarily make. But that's a discussion for another time.

Another problem that takes longer to show up is hearing loss. It's what's called an "invisible injury." When you are in the shop you're usually more concerned with keeping all your fingers and eyesight. But hearing loss can occur if your ears aren't protected.

Loss can occur regardless of the amount of time your ears are exposed to high noise levels — even if only for a few seconds. Hearing loss is cumulative. A little exposure to very loud noises here and there adds up. And over a lifetime, even a few hours a week in a home shop can lead to some type of permanent loss.

OSHA considers noise levels below 85 decibels (dB) to be safe. Anyone experiencing noise levels over 85 dB for any length of time should use some type of hearing protection.

So the editors at *Woodsmith Magazine* got to wondering how much noise is created in the shop. They purchased a sound level meter to check. You would expected that a thickness planer or radial arms aw to register the loudest noise. When cutting a piece of 6" wide hard maple each produced a noise level around 105 dB.

But they were surprised with the other tools. When routing an 1/8"-wide groove on an enclosed base router table, they got a reading of 103 dB with the doors closed. With the doors open, it registered 106 dB. And their table saw registered 104 dB.

The biggest surprise was the hand-held circular saw. It put out a whopping 110 dB while cutting 3/4"-thick plywood.

The only tools that didn't put out a dangerous level were the edge jointer, band saw, and drill press. (Actually, their shop toilet turned out to be pretty safe too — only 80 dB.)

So what can you do? There are a number of protectors available to guard your hearing. Some go in your ears, some go over your ears. Most have a noise reduction rating (NRR) from about 21 dB to 33 dB. Using a protector with an NRR of 25 brings everything in our shop down to a safe level.

Some guys like the foam ear plugs because they're inexpensive and they don't get in the way of their glasses. I like the "earmuff" style. They're inexpensive and pretty comfortable. I often forget I have them on.

Which one should you use? Whichever one is the most comfortable (so you'll actually use it).

### DRUM SANDER VACUUM

Mounting a drum sander on a drill press is a great way to sand the edge of a curved workpiece. But it produces very fine sawdust that's unhealthy to breathe — and a nuisance. So to cut down on the sawdust, I built an auxiliary drumsander table that works with my shop vacuum, see drawings below.

To make the table, build an H-shaped frame first. All the frame pieces should start out 3/4" thick and 3-1/2" wide (high). The two cross members are cut to length so they' re 1-1/2" less than the depth of the drill press table (front to back). But the front and back pieces are cut to length so they' re about twice as long as the table.

After the frame pieces are cut to size, cut a hole in one of the cross members, see drawing at right. Size the hole to accept the hose from your shop vacuum or dust collector. (It should be a friction fit.)

The last two pieces to make are the top and bottom. These are cut from a piece of 3/4" plywood, and while they' re both cut to match the depth of the drill press table (front to back), their lengths are different. The bottomis the same length as the width of the drill press table. The top is the same length as the long frame pieces.

Before assembling the box, I cut a square hole right in the center of the top to accept sanding drum inserts. Then, to keep the inserts from dropping through the hole, I screwed two cleats under the hole at the sides.

Now assemble the box. First, screw the front and back frame pieces to the bottom so the bottom is centered along their length. (Note: There aren't any screws in the art, but I used #8 x 1-1/2" Fh woodscrews.) Then to provide a lip so the box can be clamped to the drill press, attach the cross members in about 2" from each end of the plywood bottom. Finally, glue the top down to the frame. You can cut any number of inserts for different size drums. Just cut them about 1/4 inch larger than the drum size.

Using the box is simple. Just clamp it to your drill press and lower the sanding drum so it's just inside the hole. Then lock down the quill, and you're ready to sand. From *Shopnotes*.

### MEMEBER WOODWORKING BUSINESS LOCATIONS

*Paillasse* is Scott and Lannon Pias' woodworking business. They can be reached at 337-478-6524 and their shop is at 1010 Holly Street, Lake Charles, LA 70601. The Pia's have a new shop as well. Call and stop by to see it.

Rod Nunally does Plain and Fancy Scroll Saw Work Designs offers 3-D Wall Plaques, Clocks, Benches, Shelves, Animals

### Visit the LC Woodworkers website at http://org.laol.net/woodworker

and more. Rod can be reached at 337-583-2691 and is at P.O. Box 631, Sulphur, LA 70664.

New Member Lee Frazier of Lagnappe Woodworks by Lee offers Lawn Furniture, Wind Mobils, Yard Ornaments, Cabinets, Shelving, Toys and Signs. Lee's Shop is at 4017 Ellis Street, Lake Charles, LA 70615 and his phone is 337-436-8520.

We all appreciate the fine woodcraft our members demonstrate in their work.